### **PCT**

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

From the INTERNATIONAL BUREAU

To: 170: 172 cc:

HGSI

COCHAM, Christine, M. /-Leydig, Voit & Mayer, LTD. Two Prudential Plaza 180 N. Stetson Avenue Chicago, Illinois 60601-6731 ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year)
09 October 2008 (09.10.2008)

Applicant's or agent's file reference 702091

IMPORTANT NOTICE

International application No. PCT/US2007/008021

International filing date (day/month/year) 30 March 2007 (30.03.2007)

Priority date (day/month/year)
31 March 2006 (31.03.2006)

Applicant

HUMAN GENOME SCIENCES INC. et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

LAH



LEYDIG, VOIT & MAYER
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OCT 2 9 2008

PAT/TM Due Date

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Beate Giffo-Schmitt

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Form PCT/IB/326 (January 2004)

### PATENT COOPERATION TREATY

## **PCT**

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

| Applicant's or agent's file reference 702091  | FOR FURTHER A   | ACTION                                   | See item 4 below                          |                                  |  |  |  |  |
|---|---|--|---|----------------------------------|--|--|--|--|
| International application No.<br>PCT/US2007/008021  | International filing date (day/month/year) 30 March 2007 (30.03.2007)  Priority date (day/month/year) 31 March 2006 (31.03.2006)                                |  |   |                                  |  |  |  |  |
| International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237   |   |  |   |                                  |  |  |  |  |
| Applicant<br>HUMAN GENOME SCIENCES IN   | C.  | 10-14-14-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1 | W-10-10-10-10-10-10-10-10-10-10-10-10-10- |                                  |  |  |  |  |
|   |   |  | 1 AH                                      | LEYDIG, WOIT & MAYER<br>RECEIVED |  |  |  |  |
|   |   |  |   | OCT 2 9 2008                     |  |  |  |  |
|   |   |  |   | PAY/TM Due Date                  |  |  |  |  |
| <ol> <li>This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the<br/>International Searching Authority under Rule 44 bis.1(a).</li> </ol>   |   |  |   |                                  |  |  |  |  |
| 2. This REPORT consists of a total of 4 sheets, including this cover sheet.   |   |  |   |                                  |  |  |  |  |
| In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.   |   |  |   |                                  |  |  |  |  |
| 3. This report contains indication  | 3. This report contains indications relating to the following items:  |  |   |                                  |  |  |  |  |
| Box No. I   | Basis of the report   |  |   |                                  |  |  |  |  |
| Box No. II  | Priority  |  |   |                                  |  |  |  |  |
| Box No. III   | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |  |   |                                  |  |  |  |  |
| Box No. IV  | Lack of unity of invention  |  |   |                                  |  |  |  |  |
| Box No. V   | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |  |   |                                  |  |  |  |  |
| Box No. VI  | Certain documents cited   |  |   |                                  |  |  |  |  |
| Box No. VII   | Certain defects in the international application  |  |   |                                  |  |  |  |  |
| Box No. VIII  | Box No. VIII Certain observations on the international application  |  |   |                                  |  |  |  |  |
| 4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2). |   |  |   |                                  |  |  |  |  |
|   |   |  |   | · ·                              |  |  |  |  |
|   |   | Date of issuance of<br>30 September 20   |   |                                  |  |  |  |  |
| The International But<br>34, chemin des Co  | Authorized officer  |  |   |                                  |  |  |  |  |
| 1211 Geneva 20, S   |   | Beate Giffo-S                            | Schmitt                                   |                                  |  |  |  |  |
| Facsimile No. +41 22 338 82 70  | e-mail: pt03.pct@wipo.int   |  |   |                                  |  |  |  |  |

Form PCT/IB/373 (January 2004)

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| From the   | TIONAL CRAP  | need-mile control and                                    | PATENT COOPE   | RATION TRE   | ZATY  |  |
|--|--|--|--|--|---|--|
| INTERNATIONAL SEARCHING AUTHORITY  To: CHRISTINE M. COCHRAN LEYDIG, VOIT & MAYER, LTD. TWO PRUDENTIAL PLAZA, SUITE 4900 180 N. STETSON AVENUE CHICAGO, IL 60601-6731 |  | PCT  |  |  |   |  |
|  |  | WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY |  |  |   |  |
|  |  |  |  | (PCT Rule 43bis.1)   |   |  |
|  |  |  |  | Date of mailing (day/month/year)   | <b>04</b> AUG 2008  |  |
| Applicant  | 's or agent's file   | or agent's file reference FOR FURTHER ACTION             |  |  | ACTION  |  |
| 705473-6   |  | ·  |  | <u> </u>   | See paragraph 2 below   |  |
|  | nal application No   | 0,   | International filing date                              | (day/month/year) Priority date (day/month/year)  |   |  |
| PCT/US0  |  | (TDC)  | 30 March 2007 (30.03.20 r both national classificati   |  | 31 March 2006 (31.03.2006)  |  |
| ( 2006.01)<br>USPC:<br>Applicant   | )<br>435/326,331,7.1;;   | 530/387.1,387.   | 00( 2006.01);G01N 33/53<br>3,388.1                     | 3  |   |  |
|  | 02.10.112.0012.  |  | 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -                |  |   |  |
| 1. This  | opinion contains i   | indications relat  | ting to the following items                            | s:   |   |  |
| $\boxtimes$  | Box No. I  | Basis of the   | opinion  |  |   |  |
|  | Box No. II   | Priority   |  |  |   |  |
|  | Box No. III  | Non-establis   | hment of opinion with reg                              | with regard to novelty, inventive step and industrial applicability                            |   |  |
| Ш  | Box No. IV   | Lack of unity  | k of unity of invention                                |  |   |  |
| $\boxtimes$  | Box No. V  |  |  | is.1(a)(i) with regard to novelty, inventive step or industrial ions supporting such statement |   |  |
|  | Box No. VI   | Certain docu   | ments cited  |  |   |  |
|  | Box No. VII Certain defects in the international application       |  |  |  |   |  |
|  | Box No. VIII Certain observations on the international application |  |  |  |   |  |
| 2. FUR   | THER ACTIO   | N  |  |  |   |  |
| Intern<br>Autho  | national Prelimination   | ary Examining<br>his one to be th                        | Authority ("IPEA") ex                                  | cept that this does PEA has notified th  | be considered to be a written opinion of the not apply where the applicant chooses an e International Bureau under Rule 66.1 bis(b) ered. |  |
| IPEA<br>of Fo  | a written reply to   | ogether, where<br>or before the ex                       | appropriate, with amenda<br>epiration of 22 months fro | nents, before the ex   | PEA, the applicant is invited to submit to the piration of 3 months from the date of mailing whichever expires later.                     |  |
| 3. For fi  | arther details, see  | notes to Form I  | PCT/ISA/220.   |  |   |  |
| Nome ===   | I moiling address  | of the ICA/IIC   | Data of  | ion of this opinion  | Authorized officer ()   |  |
| 1  | l mailing address<br>Mail Stop PCT, Attı<br>Commissioner for P     | n: ISA/US  | 18 July 2008 (1  | tion of this opinion<br>8.07.2008)   | Lyde Jishe  |  |

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 223 13-1450
Facsimile No. (571) 273-3201 Form PCT/ISA/237 (cover sheet) (April 2007)

### PCT/US2007/008021 04.08.2008

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US07/08021

| Box No. I Basis of this opinion |   |  |  |  |  |
|---------------------------------|---|--|--|--|--|
|                                 |   |  |  |  |  |
| 1. With reg                     | gard to the language, this opinion has been established on the basis of:  |  |  |  |  |
|                                 |   |  |  |  |  |
| 2.                              | a translation of the international application into, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).  This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))  3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been |  |  |  |  |
| establis                        | hed on the basis of:  |  |  |  |  |
| <b>a</b> . 1                    | type of material  |  |  |  |  |
| [                               | a sequence listing  |  |  |  |  |
| 1                               | table(s) related to the sequence listing  |  |  |  |  |
| <b>b</b> .                      | format of material  |  |  |  |  |
|                                 | on paper  |  |  |  |  |
|                                 | in electronic form  |  |  |  |  |
| C.                              | time of filing/furnishing   |  |  |  |  |
| 1                               | contained in the international application as filed.  |  |  |  |  |
|                                 | filed together with the international application in electronic form.   |  |  |  |  |
|                                 | furnished subsequently to this Authority for the purposes of search.  |  |  |  |  |
|                                 | In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.  |  |  |  |  |
| 5. Additio                      | onal comments:  |  |  |  |  |
|                                 |   |  |  |  |  |
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Form PCT/ISA/237(Box No. I) (April 2007)

## PCT/US2007/008021 04.08.2008

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US07/08021

| Box No. V Reasoned statement under Ru applicability; citations and exp   | le 43 bis.1(a)(i) with regard to novelty, invertigations supporting such statement   | ntive step or industrial   |
|--|--|--|
| 1. Statement   |  |  |
| Novelty (N)  | Claims NONE  | YES  |
|  | Claims 1-10  | NO   |
| Inventive step (IS)  | Claims NONE  | YES  |
|  | Claims 1-10  | No   |
| Industrial applicability (IA)  | Claims 1-10  | YES  |
|  | Claims NONE  | NO   |
| 2. Citations and explanations:   |  |  |
| Claims 1-10 lack novelty under PCT Article 33(2)   | as being anticipated by Yu et al. (US 2005/018663  | 7).  |
| Yu discloses the hybridoma with ATCC Deposit N and 2 of the reference). Additionally, Yu teaches a domain of SEQ ID NO:59, wherein both SEQ ID N the reference). Further, Yu teaches that the antibod antibody fragment, and that and the antibody can b detecting Neutrokine-alpha with the antibody (clair | monoclonal antibody comprising the VH domain of 10:58 and 59 are 100% identical to the present SEC by can be a chimeric antibody, a humanized antibody alphabeled (claims 6-8 of the reference). Furthermore | of SEQ ID NO:58, and the VL<br>Q ID NO:58 and 59 (claims 3-5 of<br>ly, a single chain antibody or an |
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